

## CLAIM AMENDMENTS

1. (Originally presented) A composite material comprising colloidal silica-bonded alkaline earth silicate fibers in which any bonding agents or fillers comprise low amounts of alumina so that the composite material comprises less than 1% by weight aluminium expressed as  $\text{Al}_2\text{O}_3$ .
2. (Amended) A composite material as claimed in claim 1 in which the composite material comprises less than 0.5% by weight ~~by weight~~ of aluminium expressed as  $\text{Al}_2\text{O}_3$ .
3. (Amended) A composite material as claimed in claim 2 in which the composite material comprises less than 0.1% by weight ~~by weight~~ of aluminium expressed as  $\text{Al}_2\text{O}_3$ .
4. (Originally presented) A composite material as claimed in claim 1 in which the composite material is essentially free of aluminium.
5. (Originally presented) A composite material as claimed in claim 1 and comprising less than 1% by weight sodium expressed as  $\text{Na}_2\text{O}$ .
6. (Originally presented) A composite material as claimed in claim 5 and comprising less than 0.5% by weight sodium expressed as  $\text{Na}_2\text{O}$ .

7. (Originally presented) A composite material as claimed in claim 6 and comprising less than 0.1% by weight sodium expressed as  $\text{Na}_2\text{O}$ .

8. (Originally presented) A composite material as claimed in claim 1 in which the composite material is essentially free of sodium.

9. (Originally presented) A composite material as claimed in claim 1 and comprising less than 0.5% by weight boron expressed as  $\text{B}_2\text{O}_3$ .

10. (Originally presented) A composite material as claimed in claim 9 and comprising less than 0.1% by weight boron expressed as  $\text{B}_2\text{O}_3$ .

11. (Amended) A composite material as claimed in claim 1 in which the alkaline earth silicate fibre is itself ~~capable of~~ adapted for use without excessive shrinkage at temperatures in excess of 1200 °C.

12. (Amended) A composite material as claimed in claim 1 in which the material is obtainable by vacuum forming from a slurry containing the following ingredients (in weight %):-

Alkaline earth metal silicate fibres	70-85%
Colloidal silica (30% $\text{SiO}_2$ by weight)	3-25%
Organic binder	1-6%
Filler	11-20%

13. (Amended) A composite material as claimed in claim 12 comprising:-

Alkaline earth metal silicate fibres	70-90%
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<u>Silica binder from colloidal</u> <del>Colloidal</del> silica (30% SiO <sub>2</sub> by weight)	
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1-10%	
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Organic binder	1-6%
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Filler	11-20%
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14. (Amended) A composite material as claimed in claim 13 comprising:-

Alkaline earth metal silicate fibres	77.3-87.2%
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<u>Silica binder from colloidal</u> <del>Colloidal</del> silica (30% SiO <sub>2</sub> by weight)	
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1.2-8.2%	
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Organic binder	3.3-4.7%
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Filler	12.8-18%
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15. (Originally presented) A composite material as claimed in claim 1 in which the material is a paper comprising:-

Alkaline earth metal silicate fibre	90-95%
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Organic binder	5-10%
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Organic flocculants	<1%
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16. (Originally presented) A composite material as claimed in claim 15 in which the organic binder is an acrylic latex.

17. (Amended) A composite material as claimed in claim 1 in which the material is a material obtained by vacuum forming from a slurry comprising the ingredients:

Alkaline earth metal silicate fibre	60 parts by weight
Colloidal silica (30% by weight SiO <sub>2</sub> )	12-14 parts by weight
Starch	2.5 parts by weight

based upon the total weight of solids added to the slurry;

and in which the colloidal silica has a pH of less than 8.

18. (Amended) A composite material comprising 4-12% by weight colloidal silica, 3-6.5% starch, balance ~~to 100%~~ alkaline earth silicate fibre, to total 100% based on the weight of composite material.

19. (Amended) A composite material as claimed in claim 18 and comprising 4-9% by weight colloidal silica, 3.5-5% starch, balance ~~to 100%~~ alkaline earth silicate fibre, to total 100% based on the weight of composite material.

20. (Originally presented) A composite material as claimed in claim 18 comprising about 6% colloidal silica.

21. (Amended) A composite material as claimed in claim 1 in which the material is a material obtainable by vacuum forming from the ingredients:-

“White water”component	50-80% by volume of 30% solids colloidal silica with 20-50% by volume <del>mains</del> water
Alkaline earth metal silicate fibre	0.5-4% by weight <u>of fibre, calculated as the weight of the fibre solids to per weight of white water component</u>

and in which the colloidal silica has a pH of less than 8.

22. (Amended) A composite material as claimed in claim 1 in which the material is a material obtainable by vacuum forming from the ingredients:-

“White water”component	90-100% by volume of 30% solids colloidal silica with 10-0% by volume <del>mains</del> water
Alkaline earth metal silicate fibre	2-3% by weight <u>of fibre, calculated as the weight of the fibre solids to per weight of white water component</u>

and in which the colloidal silica has a Ph of less than 8.

23. (Amended) A composite material as claimed in claim 21 and which comprises 15-30% by weight silica binder formed from colloidal silica, balance fibre.

24. (Originally presented) A composite material as claimed in claim 17 in which the fibre is present in amounts comprising 0.5-5% by weight of the water in the slurry.

25. (Amended) A composite material as claimed in claim 1 in which the material is a material obtainable by vacuum forming from the ingredients

“White water” component	65-100% by volume of 40% solids <del>low sodium content</del> colloidal silica having a Ph of less than 10 with 35-0% by volume <del>mains water</del>
Alkaline earth metal silicate fibre	2-3% by weight of <u>fibre, calculated as weight of fibre solids to per weight of</u> white water component

wherein the sodium content of the colloidal silica is below 0.1 wt%.

26. (Originally presented) A composite material as claimed in claim 22 and which comprises 15-30% by weight colloidal silica, balance fibre.

27. (Withdrawn) A composite paper comprising, in weight percent:

Alkaline earth metal silicate fibre	90-95
Organic binder	5-10
Organic flocculants	<1.

28. (Withdrawn) A composite paper as claimed in claim 27 in which the organic binder is an acrylic latex.